

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEVADA**

ORACLE USA, INC. et al.,

Plaintiffs,

v.

RIMINI STREET, INC. and SETH RAVIN.

Defendants.

CASE NO. 2:10-cv-0106-LRH-PAL

[REDACTED VERSION]

DECLARATION OF THOMAS D. VANDER VEEN, PH.D.

December 14, 2015

Table of Contents

I.	INTRODUCTION	1
	A. Qualifications	1
	B. Assignment	2
II.	SUMMARY OF OPINIONS	3
III.	CALCULATION OF PREJUDGMENT INTEREST	5
	A. Calculation of Prejudgment Interest: Copyright Infringement Award	5
	B. Calculation of Prejudgment Interest: Computer Statute Claims Awards	5
IV.	MS. DEAN’S PREJUDGMENT INTEREST CALCULATIONS ARE FLAWED AND UNRELIABLE	7
	A. Ms. Dean Fails to Use the Appropriate Rate for Prejudgment Interest	7
	B. Ms. Dean Fails to Use a Floating Rate for Prejudgment Interest	10
	C. Ms. Dean Fails to Consider Taxes	12
	D. Ms. Dean Fails to Properly Accrue Prejudgment Interest	13
V.	CONCLUSION	15

I. INTRODUCTION

I, Thomas D. Vander Veen, hereby state and declare as follows:

A. Qualifications

1. I am a Managing Director at Epsilon Economics, an economic consulting firm. I specialize in the application of economics to intellectual property, international trade, and complex commercial disputes.
2. I have a Ph.D. in economics from Brown University. As a consultant or expert witness, I have performed economic analyses in a variety of commercial litigation engagements, including matters involving patent infringement, copyright infringement, misappropriation of trade secrets, trademark infringement, and breach of contract claims. I have performed economic analysis in a wide range of intellectual property matters, including those where the determination of prejudgment interest was at issue.
3. I have served as an economic expert in matters in the U.S. courts and before the U.S. International Trade Commission. I have also provided business consulting services related to intellectual property valuation and licensing and to the valuation of intra-company transactions. I co-developed a course and taught advanced courses on intellectual property valuation at the Licensing Executives Society, the leading professional organization for intellectual property valuation and licensing.
4. I served as an economist on the staff of Commissioner Koplan, the former Chairman and Commissioner of the U.S. International Trade Commission. In this role, I analyzed financial, trade, and industry information, and assisted Commissioner Koplan in reaching his determinations in international trade litigation matters before the Commission. Prior to my service at the U.S. International Trade Commission, I was an assistant professor of economics at Skidmore College. I am a member of the American Economic Association, the Licensing Executives Society, and I am an associate member of the International Trade Commission Trial Lawyers Association. I also served as a member of the International Trade Commission Committee of the Intellectual Property Owners Association.

5. A copy of my curriculum vitae is attached as Tab 1. Epsilon Economics bills \$625 per hour for my work on this matter. No part of any compensation to Epsilon Economics for work in this matter is affected by the results of this case. I also have been assisted by my team at Epsilon Economics.

B. Assignment

6. I have been retained by Shook, Hardy & Bacon, L.L.P. on behalf of the defendants Rimini Street, Inc. and Seth Ravin (collectively “Rimini” or “Defendants”). I have been asked to provide economic analyses related to prejudgment interest claims brought by Oracle USA, Inc., Oracle America, Inc., and Oracle International Corporation (“Oracle” or “Plaintiff”).¹
7. On November 13, 2015, Oracle submitted the Declaration of Elizabeth A. Dean Concerning Prejudgment Interest providing opinions related to the determination of prejudgment interest on Oracle’s copyright infringement award of \$35,600,000 and Oracle’s computer statute claims awards totaling \$14,427,000.² I have been asked by counsel to evaluate the analyses and opinions provided by Elizabeth A. Dean (“Ms. Dean”) and to evaluate the amount of prejudgment interest, if any, awarded to Oracle.
8. In conducting my analysis, members of my team and I have reviewed various documents produced in this litigation, including pleadings, deposition testimony, and economic and financial information, as well as publicly available information. The materials that I considered in forming the opinions set forth in this Declaration are cited in the footnotes herein.

¹ Oracle’s Motion for Prejudgment Interest; Notice of and Memorandum of Points and Authorities in Support of Motion, *Oracle USA, Inc., Oracle America, Inc., and Oracle International Corporation v. Rimini Street, Inc. and Seth Ravin*, Before the United States District Court for the District of Nevada, Case No. 2:10-cv-0106-LRH-PAL, November 13, 2015.

² Declaration of Elizabeth A. Dean Concerning Prejudgment Interest, November 13, 2015.

II. SUMMARY OF OPINIONS

9. Based on my education and experience, the facts of this case, and my analysis, I have reached the following conclusions:

Copyright Infringement Award

- I understand that Rimini contends that an award of prejudgment interest on the copyright infringement award is inappropriate in this case as a matter of law.³
- In the event that the Court determines that an award of prejudgment interest is appropriate for the copyright infringement award, I understand that the appropriate prejudgment interest rate is based on 28 U.S.C. § 1961 and “equal to the weekly average 1-year constant maturity Treasury yield...for the week preceding the date of judgment,”⁴ which I have calculated to be \$1,768,006.⁵
- Even assuming that an award of prejudgment interest is appropriate on the copyright infringement claim, and even assuming that the rate set forth in 28 U.S.C. § 1961 does not apply here, Ms. Dean’s analysis of prejudgment interest for the copyright infringement award is fundamentally flawed and her corresponding calculations are speculative and unreliable. Ms. Dean ignores the statutory rate, and applies a different rate, but at the same time, she:
 - Fails to use the appropriate rate of prejudgment interest;
 - Fails to use a floating rate of prejudgment interest;
 - Fails to properly consider taxes; and

³ Based on discussions with counsel.

⁴ Based on discussions with counsel. *See also* 28 U.S.C. § 1961. Although I understand that a judgment has yet to be entered by the court in this matter, I have estimated the weekly average 1-year constant maturity Treasury yield “for the week preceding the date of judgment” to be 0.54%, which is the weekly average 1-year constant maturity Treasury yield for the week ending December 4, 2015. I understand that I may be asked to submit a supplemental report calculating the prejudgment interest at the weekly average 1-year constant maturity Treasury yield for the week preceding the judgment, once judgment has been entered and in the event that the Court determines that an award of prejudgment interest is appropriate for the copyright infringement award.

⁵ *See* Tab 2.

- Fails to properly accrue interest from the time the damages allegedly occurred.

Ms. Dean has not explained why she both (i) ignored the statutory rate, and (ii) ignored these economic principles. Applying the appropriate floating rate of prejudgment interest, the appropriate tax adjustment, and the appropriate interest accrual methodology here, Ms. Dean's prejudgment interest calculation is reduced as reflected in Tab 3(d) and Tab 4(d) for the copyright damages award.⁶

Computer Statute Claims Award

- I understand that Rimini contends that an award of prejudgment interest on the computer statute claims award is inappropriate in this case as a matter of law.⁷
- Even assuming that an award of prejudgment interest is appropriate on the computer statute claims, Ms. Dean's analysis of prejudgment interest for the computer statute claim awards is fundamentally flawed and her corresponding calculations are speculative and unreliable. She fails to properly accrue interest from the time the damages allegedly occurred. Applying the appropriate interest accrual period reduces Ms. Dean's prejudgment interest calculation to \$3,932,238 for the California claims⁸ and \$3,854,756 for the Nevada claims.⁹

⁶ See Tab 3(d), Tab 4(d).

⁷ I understand that Rimini contends that Oracle is not entitled to prejudgment interest on the computer statute claims because these claims fail as a matter of law, as described in Rimini's pending Rule 50(b) motion, among other reasons.

⁸ See Tab 5.

⁹ See Tab 6.

III. CALCULATION OF PREJUDGMENT INTEREST

10. I have been asked to determine the appropriate prejudgment interest, if applicable, on the jury's damages awards. I discuss my findings below.

A. Calculation of Prejudgment Interest: Copyright Infringement Award

11. As stated, I understand that Rimini contends that an award of prejudgment interest on the copyright infringement claim award is inappropriate in this case as a matter of law. And in the event that the Court determines that an award of prejudgment interest is appropriate for the copyright infringement claim, I understand that the appropriate prejudgment interest rate is based on 28 U.S.C. § 1961 and "equal to the weekly average 1-year constant maturity Treasury yield...for the week preceding the date of judgment,"¹⁰ which I have calculated to be \$1,768,006.¹¹

B. Calculation of Prejudgment Interest: Computer Statute Claims Awards

12. I understand that Oracle is seeking prejudgment interest on the computer statute claim covered by California law, and in the alternative it is seeking prejudgment interest for the computer statute claim covered by Nevada law. I further understand that Rimini contends that an award of prejudgment interest on both computer statute claims is inappropriate in this case as a matter of law.¹²
13. In the event that the Court determines that an award of prejudgment interest is appropriate for the computer statute claim covered under California law, I understand that a fixed rate

¹⁰ Based on discussions with counsel. *See also* 28 U.S.C. § 1961. Although I understand that a judgment has yet to be entered by the court in this matter, I have estimated the weekly average 1-year constant maturity Treasury yield "for the week preceding the date of judgment" to be 0.54%, which is the weekly average 1-year constant maturity Treasury yield for the week ending December 4, 2015. I understand that I may be asked to submit a supplemental report calculating the prejudgment interest at the weekly average 1-year constant maturity Treasury yield for the week preceding the judgment, once judgment has been entered and in the event that the Court determines that an award of prejudgment interest is appropriate for the copyright infringement claim.

¹¹ *See* Tab 2.

¹² Based on discussions with counsel. I understand that Rimini contends that Oracle is not entitled to prejudgment interest on the computer statute claims because these claims fail as a matter of law, as described in Rimini's pending Rule 50(b) motion, among other reasons.

of 7% simple interest is used for prejudgment interest¹³ (which is the rate applied by Ms. Dean), and interest begins accruing at the point that “[a] person who is entitled to recover damages certain, or capable of being made certain by calculation, and the right to recover which is vested in the person upon a particular day, is entitled also to recover interest thereon from that day.”¹⁴ As a result, I have calculated prejudgment interest to be \$3,932,238 for the California claim.¹⁵

14. In the event that the Court determines that an award of prejudgment interest is appropriate for the computer statute claim covered under Nevada law, I understand that the prejudgment interest rate is set at 2% above “the prime rate at the largest bank in Nevada as ascertained by the Commissioner of Financial Institutions on January 1 or July 1, as the case may be, immediately preceding the date of judgment.”¹⁶ As a result, I have calculated prejudgment interest to be \$3,854,756 for the Nevada claim.¹⁷

¹³ Based on discussions with counsel.

¹⁴ California Civil Code § 3287(a).

¹⁵ See Tab 5.

¹⁶ Nev. Rev. Stat. § 17.130.

¹⁷ See Tab 6.

IV. MS. DEAN'S PREJUDGMENT INTEREST CALCULATIONS ARE FLAWED AND UNRELIABLE

15. At Oracle's request, Ms. Dean was asked to determine the prejudgment interest owed to Oracle based on the October 13, 2015 jury verdict.¹⁸ Based on her analysis and calculations, she concluded the following: 1) prejudgment interest owed to Oracle on its copyright damages award is either \$19,959,532¹⁹ or \$37,060,964,²⁰ 2) prejudgment interest owed to Oracle for computer statute damages under California law is \$4,039,560,²¹ and 3) prejudgment interest owed to Oracle for computer statute damages under Nevada law is \$4,544,505.²²
16. However, Ms. Dean's prejudgment interest analysis and calculations are flawed and unreliable. For the copyright infringement award, she: 1) fails to use the appropriate rate of prejudgment interest, 2) fails to use a floating rate of prejudgment interest, 3) fails to consider taxes, and 4) fails to properly accrue interest from the time the damages allegedly occurred. For the computer statute damages, she fails to properly accrue interest from the time the damages allegedly occurred. These errors cause Ms. Dean to significantly overstate prejudgment interest and render her calculations unreliable. I discuss these flaws below.

A. Ms. Dean Fails to Use the Appropriate Rate for Prejudgment Interest

17. In her analysis of prejudgment interest for the copyright infringement award, Ms. Dean considers the following two interest rates: 1) the "weekly average 1-year constant maturity Treasury yield for the week ending October 27, 2006," which she determined was 5.07%,²³ and 2) the "bank prime rate immediately prior to October 29, 2006," which she determined was 8.25%.²⁴ However, each of these interest rates is inappropriate for the calculation of prejudgment interest for the copyright infringement award as discussed below.

¹⁸ Declaration of Elizabeth A. Dean Concerning Prejudgment Interest, November 13, 2015, p. 2.

¹⁹ *Id.* at p. 2 and Exhibit A.

²⁰ *Id.* at p. 3 and Exhibit B.

²¹ *Id.* at p. 3 and Exhibit C.

²² *Id.* at pp. 3-4 and Exhibit D.

²³ *Id.* at p. 2.

²⁴ *Id.* at p. 3.

18. In the event that the Court determines that an award of prejudgment interest is appropriate for the copyright infringement claim, I understand that the appropriate prejudgment interest is based on 28 U.S.C. § 1961 and “equal to the weekly average 1-year constant maturity Treasury yield ... for the week preceding the date of judgment”²⁵—not the week ending prior to the date of the hypothetical negotiation in late October 2006 as calculated by Ms. Dean.
19. Ms. Dean has significantly overstated the prejudgment interest by using the 1-year constant maturity Treasury yield (“1-year T-bill rate”) from October 2006. The 1-year T-bill rate has decreased from 5.07% during October 2006 to the current rate of 0.54%.²⁶ Thus, applying this earlier rate would mean that although the rest of the world has been living under historically low interest rates since approximately early 2009²⁷—affecting everything from borrowing costs to returns on investments—Rimini would be saddled with a rate that is fixed at an artificially high point in Oracle’s favor. Correcting for this error alone reduces Ms. Dean’s prejudgment interest from \$19,959,532²⁸ to \$1,768,006.²⁹
20. Ms. Dean also errs by calculating prejudgment interest using the wrong underlying interest rate index: the prime rate. Ms. Dean’s use of the prime rate is based on the assertion that Oracle was an “involuntary creditor” to Rimini as a result of the alleged infringement and that the prime rate is a reasonable proxy for the interest rate Oracle would have charged Rimini for such a loan.³⁰

²⁵ Based on discussions with counsel. *See also* 28 U.S.C. § 1961. Although I understand that a judgment has yet to be entered by the Court in this matter, I have estimated the weekly average 1-year constant maturity Treasury yield “for the week preceding the date of judgment” to be 0.54%, which is the weekly average 1-year constant maturity Treasury yield for the week ending December 4, 2015.

²⁶ U.S. Treasury securities weekly average for the 1-year constant maturity yield during October 2006 and in the week ending 12/4/15. (<http://www.federalreserve.gov/releases/h15/data.htm>).

²⁷ For example, the 1-year T-bill rate went from 5.07% during October 2006 to 0.37% during January 2009. Data based on U.S. Treasury securities weekly average for the 1-year constant maturity yield. (<http://www.federalreserve.gov/releases/h15/data.htm>).

²⁸ Declaration of Elizabeth A. Dean Concerning Prejudgment Interest, November 13, 2015, p. 2 and Exhibit A.

²⁹ *See* Tab 2.

³⁰ Oracle’s Motion for Prejudgment Interest; Notice of and Memorandum of Points and Authorities in Support of Motion, *Oracle USA, Inc., Oracle America, Inc., and Oracle International Corporation v. Rimini Street, Inc. and Seth Ravin*, Before the United States District Court for the District of Nevada, Case No. 2:10-cv-0106-LRH-PAL, November 13, 2015.

21. Among other problems with this argument is that it implicitly assumes the defendant committed a wrongful act to coerce a loan from a plaintiff, and therefore the defendant should pay the same rate when “borrowing” (by committing wrongful acts) as when going to the capital markets for cash.³¹ However, the defendant cannot be said to have “coerced a loan” where, as the jury determined here, there was a serious question as to the existence and/or materiality of the liability (i.e., innocent infringement) and no willful infringement on the part of either defendant.³² Moreover, by employing an *ex post* methodology (i.e., calculating damages in which hindsight is relevant)³³ as Oracle’s expert (Ms. Dean) did in her damages analysis,³⁴ it is apparent that the plaintiff bore no risk of default by Rimini since the jury has determined the amount of damages Oracle suffered, and it is undisputed that Rimini is able to pay that award, and in reality, no default did occur. As a result, the retroactive imposition of a default premium after the default risk no longer exists is inappropriate.
22. In any event, based on Ms. Dean’s report, it does not appear that Oracle was forced to incur illiquidity costs or incremental borrowing costs as a result of foregoing the copyright

³¹ Kevin S. Marshall, *The Economics of Antitrust Injury and Firm-Specific Damages* (2008, Lawyers & Judges Publishing Company, Inc.), p. 162.

³² *Oracle USA, Inc., Oracle America, Inc., and Oracle International Corporation v. Rimini Street, Inc. and Seth Ravin*, Before the United States District Court for the District of Nevada, Case No. 2:10-cv-0106-LRH-PAL, Jury Verdict Form, Dkt. 896.

³³ I understand that courts have used *ex post* analyses to determine damages and prejudgment interest. See, e.g., *Japan Cash Mach. Co. v. MEI, Inc.*, No. 2:05-CV-01433-RCJ, 2009 WL 10316043, at *37-39 (D. Nev. Sept. 18, 2009) *aff’d*, 400 F. App’x 563 (Fed. Cir. 2010) (“JCM should not be compensated for the risk of default that is not clearly present under the circumstances”); *Mars, Inc. v. Coin Acceptors, Inc.*, 513 F. Supp. 2d 128, 133-35 (D.N.J. 2007) (“the proper relationship for the damages inquiry is a licensor-licensee relationship, not a lender-borrower relationship”); *Black & Decker Inc. v. Robert Bosch Tool Corp.*, No. 04 C 7955, 2006 WL 3359349, at *11 (N.D. Ill. Nov. 20, 2006) *vacated on other grounds*, 260 F. App’x 284 (Fed. Cir. 2008) (agreeing that “Black & Decker should not be compensated for the risk of default which is not present under the circumstances because the jury already decided the amount of damages and Bosch has the ability to pay”); see also Kevin S. Marshall, *The Economics of Antitrust Injury and Firm-Specific Damages* (2008, Lawyers & Judges Publishing Company, Inc.), pp. 153-158.

³⁴ For example, Ms. Dean used Rimini’s *actual* revenues in her attempt to calculate lost profits and infringer’s profits (see Dean Supplemental Exhibits 7.2 & 7.3). Notably, while Ms. Dean employed an *ex post* methodology in her damages analysis, she employed an *ex ante* methodology (by not considering events subsequent to the hypothetical negotiation date such as changing interest rates) in her prejudgment interest analysis.

infringement award and thus should not be awarded prejudgment interest based on the prime rate.³⁵

23. By failing to use the appropriate interest rate—namely, the 1-year T-bill rate—and instead using the prime rate, Ms. Dean significantly overstates the prejudgment interest. Correcting for this error alone reduces Ms. Dean’s prejudgment interest from \$37,060,964³⁶ to \$1,768,006.³⁷

B. Ms. Dean Fails to Use a Floating Rate for Prejudgment Interest

24. Ms. Dean’s use of *fixed* prejudgment interest rates over the entire nine-year prejudgment interest period from October 2006 through October 2015 is also significantly flawed as it contradicts fundamental economic and financial principles as well as Oracle’s own preferences.
25. As discussed previously, I understand that courts have set prejudgment interest *ex post*³⁸—that is, after the events have occurred and all interest rates are known for all past periods. Under this approach, the plaintiff bears no risk that those interest rates will change. As a

³⁵ As of May 31, 2015, Oracle had in excess of \$54 billion in available “cash, cash equivalents and marketable securities” (Oracle 10-k for year ended May 31, 2015, p. 70). Thus, Oracle maintains substantial cash reserves—similar to Apple, Inc. In *Apple v. Samsung*, the court ruled, “Apple maintains substantial cash reserves and has not presented any evidence that it needs to borrow *because* it was deprived of the damages award. Thus, here, as in *Laitram*, and as this Court found in the first case, the Court concludes the 52-week Treasury Bill rate is sufficient. The Treasury Bill rate has been accepted and employed by many courts in patent infringement cases as a reasonable method of placing the patent owner in a position equivalent to where it would have been had there been no infringement.” *Apple, Inc. v. Samsung Electronics Co. Ltd.*, 67 F. Supp. 3d 1100, 1122 (N.D. Cal. 2014).

³⁶ Declaration of Elizabeth A. Dean Concerning Prejudgment Interest, November 13, 2015, p. 3 and Exhibit B.

³⁷ See Tab 2.

³⁸ See, e.g., *Japan Cash Mach. Co. v. MEI, Inc.*, No. 2:05-CV-01433-RCJ, 2009 WL 10316043, at *37-39 (D. Nev. Sept. 18, 2009) *aff’d*, 400 F. App’x 563 (Fed. Cir. 2010) (“JCM should not be compensated for the risk of default that is not clearly present under the circumstances”); *Mars, Inc. v. Coin Acceptors, Inc.*, 513 F. Supp. 2d 128, 133-35 (D.N.J. 2007) (“the proper relationship for the damages inquiry is a licensor-licensee relationship, not a lender-borrower relationship”); *Black & Decker Inc. v. Robert Bosch Tool Corp.*, No. 04 C 7955, 2006 WL 3359349, at *11 (N.D. Ill. Nov. 20, 2006) *vacated on other grounds*, 260 F. App’x 284 (Fed. Cir. 2008) (agreeing that “Black & Decker should not be compensated for the risk of default which is not present under the circumstances because the jury already decided the amount of damages and Bosch has the ability to pay”); see also Kevin S. Marshall, *The Economics of Antitrust Injury and Firm-Specific Damages* (2008, Lawyers & Judges Publishing Company, Inc.), pp. 153-158.

result, it is appropriate to calculate prejudgment interest using a series of short-term rates that are short enough to exclude a premium for interest rate risk. Consequently, the appropriate method for computing prejudgment interest should be based on short-term, variable (or “floating”) interest rates rather than long-term (or “fixed”) interest rates. Indeed, I understand that courts have agreed to use variable interest rates over time in calculating prejudgment interest.³⁹

26. Despite this, Ms. Dean calculates prejudgment interest using *fixed* interest rates over a nine-year period which were based only on market rates in October 2006. Not only is this methodology incorrect for all of the reasons cited above, it is also inconsistent with Rimini acting in an economically rational manner, and Oracle’s own preferences.
27. As an economically rational actor, Rimini would never have been subject to a high fixed interest rate over a nine-year period as interest rates fell to historic lows. Rather, Rimini would have refinanced the principal at the lower rates. Ms. Dean simply ignores this fundamental economic principle in reaching her conclusion and thus dramatically overstates the amount of prejudgment interest.
28. In *Oracle v. SAP*, a copyright infringement matter, Oracle sought prejudgment interest at the weekly average 1-year constant maturity Treasury yield *calculated separately for each year* back to the date of the hypothetical license negotiation.⁴⁰ According to Oracle, it preferred “calculating prejudgment interest using historical rates over time, like Oracle, rather than a flat rate, like SAP, because prejudgment interest is ‘intended to cover the lost investment potential of funds to which the plaintiff was entitled, from the time of entitlement to the date of judgment.’”⁴¹
29. Ms. Dean’s failure to adjust her prejudgment interest rate periodically to match market rates during the nine-year prejudgment period causes her to significantly overstate prejudgment interest. Correcting for this error alone reduces Ms. Dean’s prejudgment

³⁹ See, e.g., *Nelson v. EG&G Energy Measurements Group, Inc.*, 37 F.3d 1384, 1391-92 (9th Cir. 1994).

⁴⁰ *USA, Inc. v. SAP AG*, 2010 WL 5372996, at *1 (N.D. Cal. Dec. 28, 2010).

⁴¹ Oracle’s Request for Leave to File Reply, *Oracle USA, Inc., et al., v. SAP AG, et al.*, Case No. 07-CV-01658 PJH (EDL), filed December 27, 2010, pp. 2-3.

interest calculations for the copyright infringement claim from \$19,959,532⁴² to \$4,392,192⁴³ when using the T-bill rates and from \$37,060,964⁴⁴ to \$16,720,138 when using the prime rates.⁴⁵

C. Ms. Dean Fails to Consider Taxes

30. Another important consideration for calculating prejudgment interest is the effect of taxes. Typically, interest received by companies (or plaintiffs) is taxable as it is received over time. However, prejudgment interest is accumulated and ultimately awarded to the plaintiff without taxes being paid during the intervening damages period. As a result, in order to make the plaintiff “whole”—and not overcompensate the plaintiff—only the plaintiff’s *after-tax* interest rate on the damages award should be used to calculate prejudgment interest.⁴⁶
31. Despite this, Ms. Dean fails to consider Oracle’s effective tax rates during the nine-year prejudgment interest period, which causes her to significantly overstate prejudgment interest. Correcting for this error alone reduces Ms. Dean’s prejudgment interest calculations for the copyright infringement claim from \$19,959,532⁴⁷ to \$14,223,988⁴⁸ when using the T-bill rates and from \$37,060,964⁴⁹ to \$25,535,569⁵⁰ when using the prime rates.

⁴² Declaration of Elizabeth A. Dean Concerning Prejudgment Interest, November 13, 2015, p. 2 and Exhibit A.

⁴³ See Tab 3(a).

⁴⁴ Declaration of Elizabeth A. Dean Concerning Prejudgment Interest, November 13, 2015, p. 3 and Exhibit B.

⁴⁵ See Tab 4(a).

⁴⁶ For example, see Franklin M. Fisher and R. Craig Romaine, “Janis Joplin’s Yearbook and the Theory of Damages,” *Journal of Accounting, Auditing & Finance*, Vol.5, Numbers 1/2 (Winter/Spring 1990), pp. 148-149.

⁴⁷ Declaration of Elizabeth A. Dean Concerning Prejudgment Interest, November 13, 2015, p. 2 and Exhibit A.

⁴⁸ See Tab 3(b).

⁴⁹ Declaration of Elizabeth A. Dean Concerning Prejudgment Interest, November 13, 2015, p. 3 and Exhibit B.

⁵⁰ See Tab 4(b).

D. Ms. Dean Fails to Properly Accrue Prejudgment Interest

32. Lastly, another important consideration for calculating prejudgment interest is the basis upon which the prejudgment interest rate accrues. I understand that case law establishes that prejudgment interest must account for damages that may occur not at a single point in time, but over a period of time. Where such damages were incurred at various times, interest shall be computed upon each item from the date it was incurred.⁵¹
33. In this case, the jury awarded \$35.6 million in copyright infringement damages based on a “fair market value license”—a theory put forth by Rimini and Mr. Ravin through their damages expert Scott D. Hampton (“Mr. Hampton”), based on Rimini’s avoided costs.⁵² Under Mr. Hampton’s damages theory, the costs avoided by Rimini were incurred over time.⁵³ Furthermore, the jury was instructed that the fair market value license already “takes into account defendant’s profits attributable to its infringement.”⁵⁴
34. However, to the extent that the Court determines that prejudgment interest is appropriate for either the copyright infringement award or the computer statute claims award, I understand that it is appropriate to “determine[] what the . . . royalty payments would have been, and calculate[] prejudgment interest on each payment from the time it would have become due.”⁵⁵ Since the jury’s copyright infringement award (\$35.6 million) appears to be based on Mr. Hampton’s analysis of Rimini’s avoided costs—which occurred over time—it is reasonable to allocate this jury award in proportion to Mr. Hampton’s analysis

⁵¹ *Williams v. Bridgeport Music, Inc.*, No. LA CV13-06004 JAK (AGRx), 2015 WL 4479500 at *47 (C.D. Cal. July 14, 2015); *Getty Images (US), Inc. v. Virtual Clinics*, No. C13-0626JLR, 2014 WL 358412, at *6 (W.D. Wash. Jan. 31, 2014).

⁵² Expert Report of Scott D. Hampton, March 30, 2012 and Rebuttal/Supplemental Expert Report of Scott D. Hampton, September 2, 2015; *see also* Trial Tr. (9/24) 1818-19.

⁵³ Trial Tr. (9/24 Tr.) 1818-19. Further, I understand that Oracle admits that Mr. Hampton offered “avoided costs for each year.” Oracle’s Motion for Prejudgment Interest; Notice of and Memorandum of Points and Authorities in Support of Motion, *Oracle USA, Inc., Oracle America, Inc., and Oracle International Corporation v. Rimini Street, Inc. and Seth Ravin*, Before the United States District Court for the District of Nevada, Case No. 2:10-cv-0106-LRH-PAL, November 13, 2015.

⁵⁴ *Oracle USA, Inc., Oracle America, Inc., and Oracle International Corporation v. Rimini Street, Inc. and Seth Ravin*, Before the United States District Court for the District of Nevada, Case No. 2:10-cv-0106-LRH-PAL, Jury Instructions (No. 28), Dkt. 880 at 35.

⁵⁵ *General Motors*, 461 U.S. at 651.

of Rimini's avoided costs.⁵⁶ Likewise, since Oracle contends that the jury's computer statute claims award (\$14.4 million) is based on Ms. Dean's analysis of lost profits—which would have occurred over time—it is reasonable to allocate this jury award in proportion to Ms. Dean's analysis of Oracle's lost profits.⁵⁷

35. However, Ms. Dean fails to follow such an approach in her analyses of prejudgment interest related to both the copyright infringement award and the computer statute claims award.⁵⁸ Instead, Ms. Dean's analysis assumes that Rimini's avoided costs and Oracle's database license fees are all incurred at the moment of first infringement—rather than over time as indicated by Rimini's expert as well as Ms. Dean herself. Moreover, Ms. Dean's analysis presumes that in the “but-for world” Rimini would have paid Oracle the entire jury award (\$50 million) in an up-front, lump sum payment. However, given the uncertainty of Rimini's future cost savings as well as the uncertainty of Oracle's future database licensing fees as of October 2006, it is unlikely Rimini would have agreed to such a large up-front payment. Instead, Rimini would likely have structured the payment over time as a running royalty—to reduce its risk of not meeting forecasted expectations and to better match its incremental savings over time.
36. By failing to properly accrue interest on the payments to Oracle that would have occurred over time, Ms. Dean significantly overstates prejudgment interest. Correcting for this error alone reduces Ms. Dean's prejudgment interest from \$19,959,532⁵⁹ to \$8,759,081⁶⁰ (when using the T-bill rates) and from \$37,060,964⁶¹ to \$15,249,774⁶² (when using the prime

⁵⁶ See Tab 7(a); See also *Oracle USA, Inc., Oracle America, Inc., and Oracle International Corporation v. Rimini Street, Inc. and Seth Ravin*, Before the United States District Court for the District of Nevada, Case No. 2:10-cv-0106-LRH-PAL, Trial Exhibit DTX 3022.

⁵⁷ See Tab 7(b). Ms. Dean calculated \$14.4 million by determining the lost profits for the customers whose IDs Rimini Street allegedly used for automated downloading, namely: (1) Access Intelligence, (2) Dick's Sporting Goods, (3) Genesis Healthcare, (4) Giant Cement, (5) Harte Hanks Response Management, (6) Johnson Outdoors, (7) Kansas City Board of Pub. Utilities, (8) Sphereon Corp, (9) Teleroute, (10) XO, and (11) Yum Services Group. See Dean Tr. 1833:13-19; Hicks Tr. 1180:21-1181:1.

⁵⁸ Declaration of Elizabeth A. Dean Concerning Prejudgment Interest, November 13, 2015, Exhibits A-D.

⁵⁹ *Id.* at p. 2 and Exhibit A.

⁶⁰ See Tab 3(c).

⁶¹ Declaration of Elizabeth A. Dean Concerning Prejudgment Interest, November 13, 2015, p. 3 and Exhibit B.

rates) for the copyright infringement award and reduces prejudgment interest from \$4,039,560⁶³ to \$3,932,238⁶⁴ for the California award and from \$4,544,505⁶⁵ to \$3,854,756⁶⁶ for the Nevada award.

V. CONCLUSION

37. Based on my education and experience, the facts of this case, and my analysis, I have reached the following conclusions:

Copyright Infringement Award

- I understand that Rimini contends that an award of prejudgment interest on the copyright infringement claim is inappropriate in this case as a matter of law.
- In the event that the Court determines that an award of prejudgment interest is appropriate for the copyright infringement claim, I understand that the appropriate prejudgment interest is based on 28 U.S.C. § 1961 and “equal to the weekly average 1-year constant maturity Treasury yield ... for the week preceding the date of judgment,”⁶⁷ which I have calculated to be \$1,768,006.⁶⁸
- Even assuming that an award of prejudgment interest is appropriate on the copyright infringement claim, and even assuming that the rate set forth in 28 U.S.C. § 1961 does not apply here, Ms. Dean’s analysis of prejudgment interest for the copyright infringement claim is fundamentally flawed and her corresponding calculations are

⁶² See Tab 4(c).

⁶³ Declaration of Elizabeth A. Dean Concerning Prejudgment Interest, November 13, 2015, p. 3 and Exhibit C.

⁶⁴ See Tab 5.

⁶⁵ Declaration of Elizabeth A. Dean Concerning Prejudgment Interest, November 13, 2015, p. 4 and Exhibit D.

⁶⁶ See Tab 6.

⁶⁷ Based on discussions with counsel. See also 28 U.S.C. § 1961. Although I understand that a judgment has yet to be entered by the court in this matter, I have estimated the weekly average 1-year constant maturity Treasury yield “for the week preceding the date of judgment” to be 0.54%, which is the weekly average 1-year constant maturity Treasury yield for the week ending December 4, 2015.

⁶⁸ See Tab 2.

speculative and unreliable. Ms. Dean ignores the statutory rate, and applies a different rate, but at the same time, she:

- Fails to use the appropriate rate of prejudgment interest;
- Fails to use a floating rate of prejudgment interest;
- Fails to properly consider taxes; and
- Fails to properly accrue interest from the time the damages allegedly occurred.

Ms. Dean has not explained why she both (i) ignored the statutory rate, and (ii) ignored these economic principles. Applying the appropriate floating rate of prejudgment interest, the appropriate tax adjustment, and the appropriate interest accrual methodology here, Ms. Dean's prejudgment interest calculation is reduced as reflected in Tab 3(d) and Tab 4(d) for the copyright damages award.⁶⁹

Computer Statute Claims Award

- I understand that Rimini contends that an award of prejudgment interest on the computer statute claims is inappropriate in this case as a matter of law.⁷⁰
- Ms. Dean's analysis of prejudgment interest for the computer statute claims awards is fundamentally flawed and her corresponding calculations are speculative and unreliable. She fails to properly accrue interest from the time the damages allegedly occurred. Applying the appropriate interest accrual period reduces Ms. Dean's prejudgment interest calculation to \$3,932,238 for the California claims⁷¹ and \$3,854,756 for the Nevada claims.⁷²

⁶⁹ See Tab 3(d), Tab 4(d).

⁷⁰ I understand that Rimini contends that Oracle is not entitled to prejudgment interest on the computer statute claims because these claims fail as a matter of law, as described in Rimini's pending Rule 50(b) motion, among other reasons.

⁷¹ See Tab 5.

⁷² See Tab 6.

I declare under penalty of perjury under the laws of the United States and the State of Nevada that the foregoing is true and correct.

A handwritten signature in blue ink, appearing to read 'T. Vander Veen', is written above a horizontal line.

Thomas D. Vander Veen, Ph.D.
Managing Director, Epsilon Economics
December 14, 2015

Tab 1



Thomas D. Vander Veen, Ph.D.
Managing Director

Epsilon Economics
111 South Wacker Drive; 50th Floor
Chicago, Illinois 60606

Office: 312.637.2960
Mobile: 708.655.0358

tvanderveen@epsiloneconomics.com

Summary

Thomas Vander Veen specializes in the application of economics to intellectual property, international trade, and complex commercial disputes. Dr. Vander Veen has served as an economic expert in U.S. Courts, state courts and before the U.S. International Trade Commission.

His expertise includes valuation of intellectual property; evaluation of economic damages related to patent, copyright and trademark infringement, false advertising, breach of contract, and theft of trade secrets; and economic analysis in section 337 intellectual property matters before the U.S. International Trade Commission. Dr. Vander Veen's analysis of economic damages has included the development and analysis of consumer surveys. His intellectual property experience also includes the evaluation of commercial success of patented products, including in ANDA actions. He has studied market structure, competition, and performance of numerous pharmaceutical products, including pricing, marketing and promotion, and regulatory approval. He has performed economic analysis in numerous industries, including medical devices, pharmaceuticals, consumer retail products, consumer electronic devices, semiconductors, software and automotive products.

Dr. Vander Veen served as the principal economic advisor to a Commissioner, and subsequently the Chairman, of the U.S. International Trade Commission. Previously, Dr. Vander Veen was an assistant professor of economics at Skidmore College. He earned his Ph.D. in economics from Brown University.



Education

- Ph.D. (Economics), Brown University, 1998
- M.A. (Economics), Brown University, 1992
- B.A. (Economics and Mathematics), Calvin College, 1990

Professional and Academic Experience

- Epsilon Economics
Managing Director and President, 2015 – present
- Navigant Economics
Managing Director and Principal, 2013 – 2015
Director and Principal, 2010 – 2013
- LECG, LLC
Senior Managing Economist, 2006 – 2010
- Wheaton College
Adjunct Instructor of Economics – 2009
- Charles River Associates, Inc. / CRA International, Inc. / InteCap, Inc.
Associate Principal, 2005 – 2006
Associate, 2003 – 2005
- U.S. International Trade Commission
Economist and Advisor to Commissioner Stephen Koplan, 1999 – 2003
- Skidmore College
Assistant Professor of Economics, 1997 – 1999

Professional Affiliations

- American Economic Association
- Licensing Executives Society
- International Trade Commission Trial Lawyers Association (Associate Member)



Expert Testimony

1. *Zimmer, Inc. v. **Stryker Corporation; Howmedica Osteonics Corp.; et al.***
U.S. District Court – Northern District of Indiana
Case No. 3:14-cv-00152-JD-CAN
Breach of Contract, Breach of Fiduciary Duty, Unfair Competition, Tortious Interference
2. *Certain Electronic Devices, Including Wireless Communication Devices, Computers, Tablet Computers, Digital Media Players, and Cameras*
Ericsson Inc. and Telefonaktiebolaget LM Ericsson v. **Apple Inc.**
U.S. International Trade Commission
Investigation No. 337-TA-952
Patent Infringement
3. *Certain Lithium Metal Oxide Cathode Materials, Lithium-Ion Batteries for Power Tool Products Containing Same, and Power Tool Products with Lithium-Ion Batteries Containing Same*
BASF Corporation and UChicago Argonne, LLC v. **Umicore S.A., Umicore USA, Inc., et al.**
U.S. International Trade Commission
Investigation No. 337-TA-951
Patent Infringement
4. *Certain Network Devices, Related Software and Components Thereof (II)*
Cisco Systems, Inc. v. **Arista Networks, Inc.**
U.S. International Trade Commission
Investigation No. 337-TA-945
Patent Infringement
5. *Certain Light-Emitting Diode Products and Components Thereof*
Cree, Inc. v. **Feit Electric Co., Inc., Unity Opto Technology, Co. Ltd., et al.**
U.S. International Trade Commission
Investigation No. 337-TA-947
Patent Infringement, False Advertising
6. *Certain Three-Dimensional Cinema Systems and Components Thereof*
RealD, Inc. v. **MasterImage 3D, Inc. and MasterImage 3D Asia, LLC**
U.S. International Trade Commission
Investigation No. 337-TA-939
Patent Infringement



7. *Certain Network Devices, Related Software and Components Thereof (I)*
Cisco Systems, Inc. v. **Arista Networks, Inc.**
U.S. International Trade Commission
Investigation No. 337-TA-944
Patent Infringement
8. **LG Chem, LTD.** v. *Celgard, LLC*
The United States Patent and Trademark Office, Patent Trial and Appeal Board
Case No. IPR2014-00692
Patent Review
9. *Pfizer Inc. and UCB Pharma GMBH* v. **Alkem Pharmaceuticals, Inc. et al.**
U.S. District Court – District of Delaware
Case No. 1:13-cv-01110-GMS
Patent Infringement
10. *Certain Consumer Electronics and Display Devices with Graphics Processing and Graphics Processing Units Therein*
NVIDIA Corporation v. **Qualcomm Inc.**, Samsung Electronics Co., Ltd. et al.
U.S. International Trade Commission
Investigation No. 337-TA-932
Patent Infringement
11. **Heckler & Koch, Inc., Heckler & Koch GmbH, et al.** v. *German Sport Guns GmbH and American Tactical Imports, Inc.*
U.S. District Court – Southern District of Indiana
Case No. 1:11-CV-1108 SEB-TAB
Breach of Contract, Tortious Interference
12. *Certain Television Sets, Television Receivers, Television Tuners, and Components Thereof*
Cresta Technology Corporation v. **Silicon Laboratories, Inc., MaxLinear, Inc. et al.**
U.S. International Trade Commission
Investigation No. 337-TA-910
Patent Infringement
13. *Certain Non-Volatile Memory Devices and Products Containing Same*
Macronix International Co., Ltd. et al. v. **Spansion, Inc. et al.**
U.S. International Trade Commission
Investigation No. 337-TA-909
Patent Infringement



14. *Certain Soft-Edged Trampolines and Components Thereof*
Springfree Trampoline, Inc. et al. v. Vuly Trampolines Pty. Ltd.
U.S. International Trade Commission
Investigation No. 337-TA-908
Patent Infringement
15. *Certain Optical Disc Drives, Components Thereof and Products Containing the Same*
Optical Devices, LLC v. **Lenovo Group Ltd., LG Electronics, Inc. et al.**
U.S. International Trade Commission
Investigation No. 337-TA-897
Patent Infringement
16. *Certain Sleep-Disordered Breathing Treatment Systems and Components Thereof*
ResMed Corp., ResMed Inc., and ResMed Ltd. v. BMC Medical Co., Ltd. et al.
U.S. International Trade Commission
Investigation No. 337-TA-890
Patent Infringement
17. *United Therapeutics Corporation v. Sandoz, Inc.*
U.S. District Court – District of New Jersey
Civil Action No. 12-1617
Patent Infringement
18. *Certain Microelectromechanical Systems (“MEMS Devices”) and Products Containing the Same*
STMicroelectronics, Inc. v. **InvenSense, Inc., Roku, Inc., and Black & Decker, Inc.**
U.S. International Trade Commission
Investigation No. 337-TA-876
Patent Infringement
19. *Certain Wireless Communications Equipment and Articles Therein*
Samsung Electronics Co. Ltd., et al. v. Ericsson Inc. et al.
U.S. International Trade Commission
Investigation No. 337-TA-866
Patent Infringement
20. *Certain Wireless Devices with 3G and/or 4G Capabilities and Components Thereof*
InterDigital Communications, Inc. et al. v. **Huawei Technologies Co., Ltd., et al.**
U.S. International Trade Commission
Investigation No. 337-TA-868
Patent Infringement



21. *Certain Electronic Devices, Including Wireless Communication Devices, Tablet Computers, Media Players, and Televisions, and Components Thereof*
Ericsson Inc. et al. v. **Samsung Electronics Co. Ltd., et al.**
U.S. International Trade Commission
Investigation No. 337-TA-862
Patent Infringement
22. *Reduced Folate Nutraceutical Products and L-methylfolate Raw Ingredients*
Merck & Cie, PamLab, LLC, et al. v. Macoven Pharmaceuticals, Inc. et al.
U.S. International Trade Commission
Investigation No. 337-TA-857
Patent Infringement
23. *Certain Wireless Consumer Electronics Devices and Components Thereof*
Technology Properties Limited LLC et al. v. **Acer Inc., Amazon.com, et al.**
U.S. International Trade Commission
Investigation No. 337-TA-853
Patent Infringement
24. *Certain Audiovisual Components and Products Containing the Same*
LSI Corporation and Agere Systems, Inc. v. **Funai Electric Co., Ltd., et al.**
U.S. International Trade Commission
Investigation No. 337-TA-837
Patent Infringement
25. *Certain Electronic Imaging Devices*
FlashPoint Technology, Inc. v. **ZTE Corporation, et al.**
U.S. International Trade Commission
Investigation No. 337-TA-850
Patent Infringement
26. *Certain Consumer Electronics and Display Devices and Products Containing Same*
Graphics Properties Holdings, Inc. v. **Research in Motion Corp. et al.**
U.S. International Trade Commission
Investigation No. 337-TA-836
Patent Infringement
27. *Certain Food Waste Disposers and Components and Packaging Thereof*
Emerson Electric Co. v. **Anaheim Manufacturing Co. et al.**
U.S. International Trade Commission
Investigation No. 337-TA-838
Patent Infringement, Trade Dress Infringement



28. *Certain Electronic Digital Media Devices and Components Thereof*
Apple, Inc. v. **Samsung Electronics Co., Ltd. et al.**
U.S. International Trade Commission
Investigation No. 337-TA-796
Patent Infringement
29. **Del Monte International GmbH** v. *Del Monte Philippines, Inc. and GTL Limited*
American Arbitration Association
Breach of Contract
30. *Galderma Laboratories, L.P. et al. v. Tolmar, Inc. and Actavis Mid Atlantic LLC*
U.S. District Court – District of Delaware
C.A. No. 10-cv-45 (LPS)
Patent Infringement
31. *Certain Semiconductor Chips and Products Containing Same*
Rambus, Inc. v. **Freescale Semiconductor, Inc. et al.**
U.S. International Trade Commission
Investigation No. 337-TA-753
Patent Infringement
32. *Certain Printing and Imaging Devices and Components Thereof*
Ricoh Company, Ltd. et al. v. Oki Data Corporation et al.
U.S. International Trade Commission
Investigation No. 337-TA-690
Patent Infringement
33. *MEMS Devices and Products Containing the Same*
Analog Devices, Inc. v. **Knowles Electronics LLC**, et al.
U.S. International Trade Commission
Investigation No. 337-TA-700
Patent Infringement
34. **Software Tree, LLC** v. *Red Hat, Inc., et al.*
U.S. District Court – Eastern District of Texas
6:09-cv-00097-LED
Patent Infringement
35. *Certain MLC Flash Memory Devices and Products Containing Same*
BTG International Inc. v. Samsung Electronics Co., Ltd. et al.
U.S. International Trade Commission
Investigation No. 337-TA-683
Patent Infringement



36. *Certain Silicon Microphone Packages, and Products Containing The Same*
Knowles Electronics, LLC v. Analog Devices, Inc.
U.S. International Trade Commission
Investigation No. 337-TA-695
Patent Infringement
37. *Certain Automotive Multimedia Display and Navigation Systems, Components Thereof, and Products Containing Same*
Honeywell International, Inc. v. **Alpine Electronics, Inc., Pioneer Corporation**
U.S. International Trade Commission
Investigation No. 337-TA-657
Patent Infringement
38. O'Gara—Hess & Eisenhardt Armoring Company LLC v. **Ibis Tek, LLC et al.**
Common Pleas Court of Butler County, Ohio
CV 2006 04 1157
Misappropriation of Confidential and Trade Secret Information
39. Multimatic, Inc. v. **Faurecia Interior Systems USA, Inc.**
U.S. District Court – Eastern District of Michigan
05-60120
Breach of Contract
40. Eaton Corporation v. **ZF Meritor LLC, et al.**
U.S. District Court – Eastern District of Michigan
03-74844
Patent Infringement
41. *Certain Automated Mechanical Transmission Systems for Medium-Duty and Heavy-Duty Trucks, and Components Thereof*
Eaton Corporation v. **ZF Meritor LLC, et al.**
U.S. International Trade Commission
Investigation No. 337-TA-503
Patent infringement
42. *Certain Shirts with Pucker Free Seams and Methods of Producing Same*
TALTECH Limited, et al. v. **Esquel Apparel, Inc. et al.**
U.S. International Trade Commission
Investigation No. 337-TA-517
Patent infringement
43. *Certain Universal Transmitters for Garage Door Openers*
The Chamberlain Group, Inc. v. Skylink Technologies, Inc. et al.
U.S. International Trade Commission
Investigation No. 337-TA-497
Patent Infringement, Digital Millennium Copyright Act



Publications and Presentations

1. Speaker, *The Uncertain Future of At-Risk Launches: A Study of Injunctive Relief, Damages and the Impact of Protonix*, American Conference Institute's Second Annual Paragraph VI Disputes Master Symposium, Chicago, IL. October 1, 2014.
2. Speaker, *Valuation of Innovation Product and Intellectual Property Based Assets*, Institute of Food Technologists Pre-Annual Meeting Short Course: Commercializing Innovation in Food Products, New Orleans, LA. June 21, 2014.
3. Speaker, *Valuation of Innovation Product and Intellectual Property Based Assets*, Institute of Food Technologists Annual Meeting: Food Expo Forum, Chicago, IL. July 16, 2013.
4. Speaker, *Uniloc USA, Inc. v. Microsoft Corp.: The End of the 25% Rule*, Licensing Executives Society Aerospace and Transportation Committee Webinar, August 1, 2012.
5. "Can We 'Spot' Price-Fixing from Price Patterns?" *The Economics Committee Newsletter*, American Bar Association Section of Antitrust Law, Vol. 12, No. 1, pages 3-6 (Summer 2012).
6. Speaker, *Valuation of Innovation Product and Intellectual Property Based Assets*, Institute of Food Technologists Pre-Annual Meeting Short Course: Commercializing Innovation in Food Products, Las Vegas, NV. June 25, 2012.
7. Guest Lecturer, Patent Litigation, Chicago-Kent College of Law. March 6, 2012.
8. Panel Speaker, *Damages*, 12th Annual Silicon Valley Advanced Patent Law Institute, Palo Alto, CA. December 9, 2011.
9. Speaker, *Technical Session: Intellectual Property Perspective, Patents & Valuation*, Chicago Section – Institute of Food Technologists, River Forest, IL. June 22, 2011.
10. Guest Lecturer, IP Litigation, John Marshall Law School. March 2, 2011.
11. Speaker, *Recent Developments at the U.S. International Trade Commission*, AIPPI-US Annual Meeting and International IP Forum, Chicago, IL. November 8, 2010.
12. Instructor, *Intellectual Asset Management: Valuation*, Licensing Executives Society Professional Development Series: Intermediate, Chicago, IL. July 14, 2010.
13. Instructor, *Intellectual Asset Management: Valuation*, Licensing Executives Society Professional Development Series: Intermediate, Toronto, ON. July 16, 2008.



14. Instructor, *Intellectual Asset Management: Valuation*, Licensing Executives Society Professional Development Series: Intermediate, San Francisco, CA. March 5, 2008.
15. Panel Speaker, *Potential Impact of the Proposed Legislative Changes to Infringement Remedies and Patent Practice*, Los Angeles Intellectual Property Law Association: Washington in the West Conference, Los Angeles, CA. January 30, 2008.
16. Instructor, *Valuation of Intellectual Property*, Practising Law Institute: Annual Patent Law Institute, San Francisco, CA. January 29, 2008.
17. Instructor, *Advanced Valuation Skills*, Licensing Executives Society Professional Development Series: Intellectual Asset Management Advanced Series, Philadelphia, PA. June 13-14, 2007.
18. Instructor, *Advanced Valuation Skills*, Licensing Executives Society Professional Development Series: Intellectual Asset Management Advanced Series, San Francisco, CA. November 1-2, 2006.
19. Guest Lecturer, *Financial Issues for Engineers*, Master of Engineering Management Program, Northwestern University. March 2006.
20. "AFDC and Births to Unwed Women." With Kurt C. Schaefer and Sarah E. Hamersma. *Labour Economics*. 9, pages 801-813 (2002).
21. "Optimal Contracts for Teams: A Note on the Results of McAfee and McMillan." *International Economic Review*. 36(4), pages 1051-6 (November 1995).

Tab 2

Prejudgment Interest
Copyright Infringement Damages
*Based on Current Treasury Bill Rate**

Period Start Date	Treasury Bill Rate	Damages at Beginning of Period	Damages at End of Period	Interest Earned Each Period	Cumulative Interest
	[a]	[b] = [c] _{t-1}	[c] = [b]*([a]+1)	[d] = [c]-[b]	[e] = [d]+[e] _{t-1}
10/29/2006	0.54%	\$35,600,000	\$35,792,240	\$192,240	\$192,240
10/29/2007	0.54%	\$35,792,240	\$35,985,518	\$193,278	\$385,518
10/29/2008	0.54%	\$35,985,518	\$36,179,840	\$194,322	\$579,840
10/29/2009	0.54%	\$36,179,840	\$36,375,211	\$195,371	\$775,211
10/29/2010	0.54%	\$36,375,211	\$36,571,637	\$196,426	\$971,637
10/29/2011	0.54%	\$36,571,637	\$36,769,124	\$197,487	\$1,169,124
10/29/2012	0.54%	\$36,769,124	\$36,967,677	\$198,553	\$1,367,677
10/29/2013	0.54%	\$36,967,677	\$37,167,303	\$199,625	\$1,567,303
10/29/2014	0.54%	\$37,167,303	\$37,368,006	\$200,703	\$1,768,006

Notes and Sources:

[a] U.S. Treasury securities weekly average for the 1-year constant maturity yield in the week ending 12/4/15.
 (<http://www.federalreserve.gov/releases/h15/data.htm>).

*This is the amount of prejudgment interest that should be awarded in the event that the Court concludes any prejudgment interest is appropriate on the copyright infringement damages award. See Declaration of Thomas Vander Veen, Ph.D., December 14, 2015, paragraph 9.

Tab 3a

Correction #1 (Floating Interest Rate) to Ms. Dean's Prejudgment Interest Calculation #1 (Based on 2006 T-Bill Rate)

*Copyright Infringement Damages**

Period Start Date	Treasury Bill Rate	Damages at Beginning of Period	Damages at End of Period	Interest Earned Each Period	Cumulative Interest
	[a]	[b] = [c] _{t-1}	[c] = [b]*([a]+1)	[d] = [c]-[b]	[e] = [d]+[e] _{t-1}
10/29/2006	5.07%	\$35,600,000	\$37,404,920	\$1,804,920	\$1,804,920
10/29/2007	3.97%	\$37,404,920	\$38,889,895	\$1,484,975	\$3,289,895
10/29/2008	1.66%	\$38,889,895	\$39,535,468	\$645,572	\$3,935,468
10/29/2009	0.39%	\$39,535,468	\$39,689,656	\$154,188	\$4,089,656
10/29/2010	0.23%	\$39,689,656	\$39,780,942	\$91,286	\$4,180,942
10/29/2011	0.12%	\$39,780,942	\$39,828,679	\$47,737	\$4,228,679
10/29/2012	0.19%	\$39,828,679	\$39,904,354	\$75,674	\$4,304,354
10/29/2013	0.11%	\$39,904,354	\$39,948,249	\$43,895	\$4,348,249
10/29/2014	0.11%	\$39,948,249	\$39,992,192	\$43,943	\$4,392,192

Notes and Sources:

[a] U.S. Treasury securities weekly average 1-year constant maturity yield for the weeks ending in 10/27/2006, 10/26/2007, 10/24/2008, 10/23/2009, 10/29/2010, 10/28/2011, 10/26/2012, 10/25/2013, and 10/24/2014.
(<http://www.federalreserve.gov/releases/h15/data.htm>).

*Assuming the Court determines that prejudgment interest is appropriate on the copyright infringement damages award, and assuming the Court determines that the 2006 T-Bill rate applies rather than the T-Bill rate from one week preceding the judgment as stated in 28 U.S.C. § 1961, this calculation reflects the first correction to Ms. Dean's erroneous prejudgment interest calculation to the copyright infringement damages award.

Tab 3b

Correction #2 (After Tax Rate) to Ms. Dean's Prejudgment Interest Calculation #1 (Based on 2006 T-Bill Rate)

*Copyright Infringement Damages**

Period Start Date	Treasury Bill Rate	Oracle's Effective Tax Rate	Effective Interest Rate After Taxes	Damages at Beginning of Period	Damages at End of Period	Interest Earned Each Period	Cumulative Interest
[a]	[b]	[c] = [a]*(1-[b])	[d] = [e] _{t-1}	[e] = [d]*([c]+1)	[f] = [e]-[d]	[g] = [f]+[g] _{t-1}	
10/29/2006	5.07%	28.60%	3.62%	\$35,600,000	\$36,888,713	\$1,288,713	\$1,288,713
10/29/2007	5.07%	29.50%	3.57%	\$36,888,713	\$38,207,245	\$1,318,532	\$2,607,245
10/29/2008	5.07%	28.60%	3.62%	\$38,207,245	\$39,590,339	\$1,383,095	\$3,990,339
10/29/2009	5.07%	25.60%	3.77%	\$39,590,339	\$41,083,718	\$1,493,379	\$5,483,718
10/29/2010	5.07%	25.10%	3.80%	\$41,083,718	\$42,643,844	\$1,560,125	\$7,043,844
10/29/2011	5.07%	23.00%	3.90%	\$42,643,844	\$44,308,617	\$1,664,773	\$8,708,617
10/29/2012	5.07%	21.39%	3.99%	\$44,308,617	\$46,074,549	\$1,765,932	\$10,474,549
10/29/2013	5.07%	20.06%	4.05%	\$46,074,549	\$47,941,931	\$1,867,382	\$12,341,931
10/29/2014	5.07%	22.57%	3.93%	\$47,941,931	\$49,823,988	\$1,882,057	\$14,223,988

Notes and Sources:

[a] U.S. Treasury securities weekly average 1-year constant maturity yield for the week ending 10/27/2006.
(<http://www.federalreserve.gov/releases/h15/data.htm>).

[b] The effective tax rate is applied from the fiscal year in which the period start date lies. Oracle's fiscal year ends on May 31 of the calendar year, so the period start date in October 2006 would lie in fiscal year 2007, for example. Oracle 10-K for year ended May 31, 2009; Oracle 10-K for year ended May 31, 2010; "Oracle's Annual Effective Tax Rate," accessed December 4, 2015 at <http://csimarket.com/stocks/singleProfitabilityRatiosy.php?code=ORCL&itx>.

* Assuming the Court determines that prejudgment interest is appropriate on the copyright infringement damages award, and assuming the Court determines that the 2006 T-Bill rate applies rather than the T-Bill rate from one week preceding the judgment as stated in 28 U.S.C. § 1961, this calculation reflects the second correction to Ms. Dean's erroneous prejudgment interest calculation to the copyright infringement damages award.

Tab 3c

Correction #3 (Increasing Principal) to Ms. Dean's Prejudgment Interest

Calculation #1 (Based on 2006 T-Bill Rate)

*Copyright Infringement Damages**

Period Start Date	Treasury Bill Rate	Increasing Principal	Damages at Beginning of Period	Damages at End of Period	Interest Earned Each Period	Cumulative Interest
	[a]	[b]	[c] = [b]+[d] _{t-1}	[d] = [c]*([a]+1)	[e] = [d]-[c]	[f] = [e]+[f] _{t-1}
10/29/2006	5.07%	\$451,526	\$451,526	\$474,418	\$22,892	\$22,892
10/29/2007	5.07%	\$1,154,387	\$1,628,805	\$1,711,386	\$82,580	\$105,473
10/29/2008	5.07%	\$3,069,963	\$4,781,349	\$5,023,763	\$242,414	\$347,887
10/29/2009	5.07%	\$5,343,419	\$10,367,183	\$10,892,799	\$525,616	\$873,503
10/29/2010	5.07%	\$6,347,433	\$17,240,232	\$18,114,312	\$874,080	\$1,747,583
10/29/2011	5.07%	\$6,428,284	\$24,542,596	\$25,786,906	\$1,244,310	\$2,991,893
10/29/2012	5.07%	\$6,244,436	\$32,031,342	\$33,655,331	\$1,623,989	\$4,615,882
10/29/2013	5.07%	\$5,845,977	\$39,501,308	\$41,504,024	\$2,002,716	\$6,618,598
10/29/2014	5.07%	\$714,574	\$42,218,598	\$44,359,081	\$2,140,483	\$8,759,081

Notes and Sources:

[a] U.S. Treasury securities weekly average 1-year constant maturity yield for the week ending 10/27/2006.
(<http://www.federalreserve.gov/releases/h15/data.htm>).

[b] Tab 7(a).

*Assuming the Court determines that prejudgment interest is appropriate on the copyright infringement damages award, and assuming the Court determines that the 2006 T-Bill rate applies rather than the T-Bill rate from one week preceding the judgment as stated in 28 U.S.C. § 1961, this calculation reflects the third correction to Ms. Dean's erroneous prejudgment interest calculation to the copyright infringement damages award.

Tab 3d

Three Corrections to Ms. Dean's Prejudgment Interest Calculation #1 (Based on 2006 T-Bill Rate)

*Copyright Infringement Damages**

Period Start Date	Treasury Bill Rate	Oracle's Effective Tax Rate	Effective Interest Rate After Taxes	Increasing Principal	Damages at Beginning of Period	Damages at End of Period	Interest Earned Each Period	Cumulative Interest
[a]	[b]	[c] = [a]*(1-[b])	[d]	[e] = [f] _{t-1}	[f] = [e]*([c]+1)	[g] = [f]-[e]	[h] = [g]+[h] _{t-1}	
10/29/2006	5.07%	28.60%	3.62%	\$451,526	\$451,526	\$467,871	\$16,345	\$16,345
10/29/2007	3.97%	29.50%	2.80%	\$1,154,387	\$1,622,258	\$1,667,663	\$45,405	\$61,750
10/29/2008	1.66%	28.60%	1.19%	\$3,069,963	\$4,737,626	\$4,793,778	\$56,152	\$117,902
10/29/2009	0.39%	25.60%	0.29%	\$5,343,419	\$10,137,197	\$10,166,611	\$29,414	\$147,316
10/29/2010	0.23%	25.10%	0.17%	\$6,347,433	\$16,514,045	\$16,542,494	\$28,449	\$175,765
10/29/2011	0.12%	23.00%	0.09%	\$6,428,284	\$22,970,778	\$22,992,003	\$21,225	\$196,990
10/29/2012	0.19%	21.39%	0.15%	\$6,244,436	\$29,236,439	\$29,280,106	\$43,667	\$240,657
10/29/2013	0.11%	20.06%	0.09%	\$5,845,977	\$35,126,083	\$35,156,971	\$30,888	\$271,545
10/29/2014	0.11%	22.57%	0.09%	\$714,574	\$35,871,545	\$35,902,098	\$30,553	\$302,098

Notes and Sources:

[a] U.S. Treasury securities weekly average 1-year constant maturity yield for the weeks ending in 10/27/2006, 10/26/2007, 10/24/2008, 10/23/2009, 10/29/2010, 10/28/2011, 10/26/2012, 10/25/2013, and 10/24/2014.
(<http://www.federalreserve.gov/releases/h15/data.htm>).

[b] The effective tax rate is applied from the fiscal year in which the period start date lies. Oracle's fiscal year ends on May 31 of the calendar year, so the period start date in October 2006 would lie in fiscal year 2007, for example. Oracle 10-K for year ended May 31, 2009; Oracle 10-K for year ended May 31, 2010; "Oracle's Annual Effective Tax Rate," accessed December 4, 2015 at <http://csimarket.com/stocks/singleProfitabilityRatiosy.php?code=ORCL&itx>.

[d] Tab 7(a).

*Assuming the Court determines that prejudgment interest is appropriate on the copyright infringement damages award, and assuming the Court determines that the 2006 T-Bill rate applies rather than the T-Bill rate from one week preceding the judgment as stated in 28 U.S.C. § 1961, this calculation reflects the three preceding corrections on Tabs 3(a), 3(b), and 3(c), to Ms. Dean's erroneous prejudgment interest calculation to the copyright infringement damages award.

Tab 4a

**Correction #1 (Floating Interest Rate) to Ms. Dean's
Prejudgment Interest Calculation #2 (Based on Prime Rate)**
*Copyright Infringement Damages**

Period Start Date	Prime Rate	Damages at Beginning of Period	Damages at End of Period	Interest Earned Each Period	Cumulative Interest
	[a]	[b] = [c] _{t-1}	[c] = [b]*([a]+1)	[d] = [c]-[b]	[e] = [d]+[e] _{t-1}
10/29/2006	8.25%	\$35,600,000	\$38,537,000	\$2,937,000	\$2,937,000
10/29/2007	7.75%	\$38,537,000	\$41,523,618	\$2,986,617	\$5,923,617
10/29/2008	4.00%	\$41,523,618	\$43,184,562	\$1,660,945	\$7,584,562
10/29/2009	3.25%	\$43,184,562	\$44,588,060	\$1,403,498	\$8,988,060
10/29/2010	3.25%	\$44,588,060	\$46,037,172	\$1,449,112	\$10,437,172
10/29/2011	3.25%	\$46,037,172	\$47,533,381	\$1,496,208	\$11,933,381
10/29/2012	3.25%	\$47,533,381	\$49,078,215	\$1,544,835	\$13,478,215
10/29/2013	3.25%	\$49,078,215	\$50,673,257	\$1,595,042	\$15,073,257
10/29/2014	3.25%	\$50,673,257	\$52,320,138	\$1,646,881	\$16,720,138

Notes and Sources:

[a] Federal Reserve Statistical Release Form H.15, Prime Rate. Prime Rate is equal to the rate on the first day of each period. (<http://www.federalreserve.gov/releases/h15/data.htm>).

*Assuming the Court determines that prejudgment interest is appropriate on the copyright infringement damages award, and assuming the Court determines that the prime rate applies rather than the rate described in 28 U.S.C. § 1961, this calculation reflects the first correction to Ms. Dean's erroneous prejudgment interest calculation to the copyright infringement damages award.

Tab 4b

Correction #2 (After Tax Rate) to Ms. Dean's Prejudgment Interest Calculation #2 (Based on Prime Rate)

*Copyright Infringement Damages**

Period Start Date	Prime Rate	Oracle's Effective Tax Rate	Effective Interest Rate After Taxes	Damages at Beginning of Period	Damages at End of Period	Interest Earned Each Period	Cumulative Interest
	[a]	[b]	[c]=[a]*(1-[b])	[d] = [e] _{t-1}	[e] = [d]*([c]+1)	[f] = [e]-[d]	[g] = [f]+[g] _{t-1}
10/29/2006	8.25%	28.60%	5.89%	\$35,600,000	\$37,697,018	\$2,097,018	\$2,097,018
10/29/2007	8.25%	29.50%	5.82%	\$37,697,018	\$39,889,571	\$2,192,553	\$4,289,571
10/29/2008	8.25%	28.60%	5.89%	\$39,889,571	\$42,239,266	\$2,349,695	\$6,639,266
10/29/2009	8.25%	25.60%	6.14%	\$42,239,266	\$44,831,912	\$2,592,646	\$9,231,912
10/29/2010	8.25%	25.10%	6.18%	\$44,831,912	\$47,602,188	\$2,770,276	\$12,002,188
10/29/2011	8.25%	23.00%	6.35%	\$47,602,188	\$50,626,117	\$3,023,929	\$15,026,117
10/29/2012	8.25%	21.39%	6.49%	\$50,626,117	\$53,909,385	\$3,283,268	\$18,309,385
10/29/2013	8.25%	20.06%	6.60%	\$53,909,385	\$57,464,736	\$3,555,351	\$21,864,736
10/29/2014	8.25%	22.57%	6.39%	\$57,464,736	\$61,135,569	\$3,670,833	\$25,535,569

Notes and Sources:

[a] Federal Reserve Statistical Release Form H.15, Prime Rate. Prime Rate is equal to the rate on the first day of each period. (<http://www.federalreserve.gov/releases/h15/data.htm>).

[b] The effective tax rate is applied from the fiscal year in which the period start date lies. Oracle's fiscal year ends on May 31 of the calendar year, so the period start date in October 2006 would lie in fiscal year 2007, for example. Oracle 10-K for year ended May 31, 2009; Oracle 10-K for year ended May 31, 2010; "Oracle's Annual Effective Tax Rate," accessed December 4, 2015 at <http://csimarket.com/stocks/singleProfitabilityRatiosy.php?code=ORCL&itx>.

*Assuming the Court determines that prejudgment interest is appropriate on the copyright infringement damages award, and assuming the Court determines that the prime rate applies rather than the rate described in 28 U.S.C. § 1961, this calculation reflects the second correction to Ms. Dean's erroneous prejudgment interest calculation to the copyright infringement damages award.

Tab 4c

Correction #3 (Increasing Principal) to Ms. Dean's Prejudgment Interest Calculation #2 (Based on Prime Rate)

*Copyright Infringement Damages**

Period Start Date	Prime Rate	Increasing Principal	Damages at Beginning of Period	Damages at End of Period	Interest Earned Each Period	Cumulative Interest
	[a]	[b]	[c] = [b]+[d] _{t-1}	[d] = [c]*([a]+1)	[e] = [d]-[c]	[f] = [e]+[f] _{t-1}
10/29/2006	8.25%	\$451,526	\$451,526	\$488,777	\$37,251	\$37,251
10/29/2007	8.25%	\$1,154,387	\$1,643,164	\$1,778,725	\$135,561	\$172,812
10/29/2008	8.25%	\$3,069,963	\$4,848,688	\$5,248,705	\$400,017	\$572,829
10/29/2009	8.25%	\$5,343,419	\$10,592,124	\$11,465,974	\$873,850	\$1,446,679
10/29/2010	8.25%	\$6,347,433	\$17,813,408	\$19,283,014	\$1,469,606	\$2,916,285
10/29/2011	8.25%	\$6,428,284	\$25,711,298	\$27,832,480	\$2,121,182	\$5,037,467
10/29/2012	8.25%	\$6,244,436	\$34,076,916	\$36,888,262	\$2,811,346	\$7,848,813
10/29/2013	8.25%	\$5,845,977	\$42,734,239	\$46,259,813	\$3,525,575	\$11,374,387
10/29/2014	8.25%	\$714,574	\$46,974,387	\$50,849,774	\$3,875,387	\$15,249,774

Notes and Sources:

[a] Federal Reserve Statistical Release Form H.15, Prime Rate. Prime Rate is equal to the rate on the first day of each period. (<http://www.federalreserve.gov/releases/h15/data.htm>).

[b] Tab 7(a).

*Assuming the Court determines that prejudgment interest is appropriate on the copyright infringement damages award, and assuming the Court determines that the prime rate applies rather than the rate described in 28 U.S.C. § 1961, this calculation reflects the third correction to Ms. Dean's erroneous prejudgment interest calculation to the copyright infringement damages award.

Tab 4d

Three Corrections to Ms. Dean's Prejudgment Interest Calculation #2 (Based on Prime Rate)

*Copyright Infringement Damages**

Period Start Date	Prime Rate	Oracle's Effective Tax Rate	Effective Interest Rate After Taxes	Increasing Principal	Damages at Beginning of Period	Damages at End of Period	Interest Earned Each Period	Cumulative Interest
[a]	[b]	[c]=[a]*(1-[b])	[d]	[e] = [d]+[f] _{t-1}	[e] = [c]*([b]+1)	[f] = [e]-[c]	[g] = [f]+[g] _{t-1}	
10/29/2006	8.25%	28.60%	5.89%	\$451,526	\$451,526	\$478,123	\$26,597	\$26,597
10/29/2007	7.75%	29.50%	5.46%	\$1,154,387	\$1,632,510	\$1,721,706	\$89,196	\$115,793
10/29/2008	4.00%	28.60%	2.86%	\$3,069,963	\$4,791,669	\$4,928,519	\$136,850	\$252,643
10/29/2009	3.25%	25.60%	2.42%	\$5,343,419	\$10,271,939	\$10,520,314	\$248,375	\$501,019
10/29/2010	3.25%	25.10%	2.43%	\$6,347,433	\$16,867,748	\$17,278,351	\$410,603	\$911,622
10/29/2011	3.25%	23.00%	2.50%	\$6,428,284	\$23,706,635	\$24,299,894	\$593,259	\$1,504,881
10/29/2012	3.25%	21.39%	2.55%	\$6,244,436	\$30,544,330	\$31,324,684	\$780,354	\$2,285,235
10/29/2013	3.25%	20.06%	2.60%	\$5,845,977	\$37,170,661	\$38,136,373	\$965,712	\$3,250,947
10/29/2014	3.25%	22.57%	2.52%	\$714,574	\$38,850,947	\$39,828,622	\$977,674	\$4,228,622

Notes and Sources:

[a] Federal Reserve Statistical Release Form H.15, Prime Rate. Prime Rate is equal to the rate on the first day of each period. (<http://www.federalreserve.gov/releases/h15/data.htm>).

[b] The effective tax rate is applied from the fiscal year in which the period start date lies. Oracle's fiscal year ends on May 31 of the calendar year, so the period start date in October 2006 would lie in fiscal year 2007, for example. Oracle 10-K for year ended May 31, 2009; Oracle 10-K for year ended May 31, 2010; "Oracle's Annual Effective Tax Rate," accessed December 4, 2015 at <http://csimarket.com/stocks/singleProfitabilityRatiosy.php?code=ORCL&itx>.

[d] Tab 7(a).

*Assuming the Court determines that prejudgment interest is appropriate on the copyright infringement damages award, and assuming the Court determines that the prime rate applies rather than the rate described in 28 U.S.C. § 1961, this calculation reflects the three preceding corrections on tabs 4(a), 4(b), and 4(c), to Ms. Dean's erroneous prejudgment interest calculation to the copyright infringement damages award.

Tab 5

Correction to Ms. Dean's Prejudgment Interest Calculation to the California State Law Claim (Increasing Principal)*

Period Start Date	Annual Interest Rate	Increasing Principal	Damages (at beginning of period)	Interest Earned Each Period	Cumulative Interest
	[a]	[b]	[c] = [b]+[c] _{t-1}	[d] = [a]*[c]	[e] = [d]+[e] _{t-1}
1/17/2012	7.00%	\$13,045,072	\$13,045,072	\$913,155	\$913,155
1/17/2013	7.00%	\$1,230,688	\$14,275,760	\$999,303	\$1,912,458
1/17/2014	7.00%	\$151,240	\$14,427,000	\$1,009,890	\$2,922,348
1/17/2015	7.00%	\$0	\$14,427,000	\$1,009,890	\$3,932,238

Notes and Sources:

Declaration of Elizabeth A. Dean Concerning Prejudgment Interest, November 13, 2015, Exhibit C.
Assumes simple interest.

[b] Tab 7(b). 2012 increasing principal is the sum of the increasing principal of years 2006-2012.

*Assuming the Court determines that prejudgment interest is appropriate on the California damages award, this calculation reflects a correction to Ms. Dean's erroneous prejudgment interest calculation to the California damages award.

Tab 6

Correction to Ms. Dean's Alternative Prejudgment Interest Calculation to the Nevada State Law Claim (Increasing Principal)*

Period Start Date	Annual Interest Rate	Increasing Principal	Damages (at beginning of period)	Interest Earned Each Period	Cumulative Interest
	[a]	[b]	[c] = [b]+[c] _{t-1}	[d] = [a]*[c]	[e] = [d]+[e] _{t-1}
1/27/2010	5.25%	\$6,904,824	\$6,904,824	\$362,503	\$362,503
1/27/2011	5.25%	\$3,439,453	\$10,344,277	\$543,075	\$905,578
1/27/2012	5.25%	\$2,700,796	\$13,045,072	\$684,866	\$1,590,444
1/27/2013	5.25%	\$1,230,688	\$14,275,760	\$749,477	\$2,339,921
1/27/2014	5.25%	\$151,240	\$14,427,000	\$757,418	\$3,097,339
1/27/2015	5.25%	\$0	\$14,427,000	\$757,418	\$3,854,756

Notes and Sources:

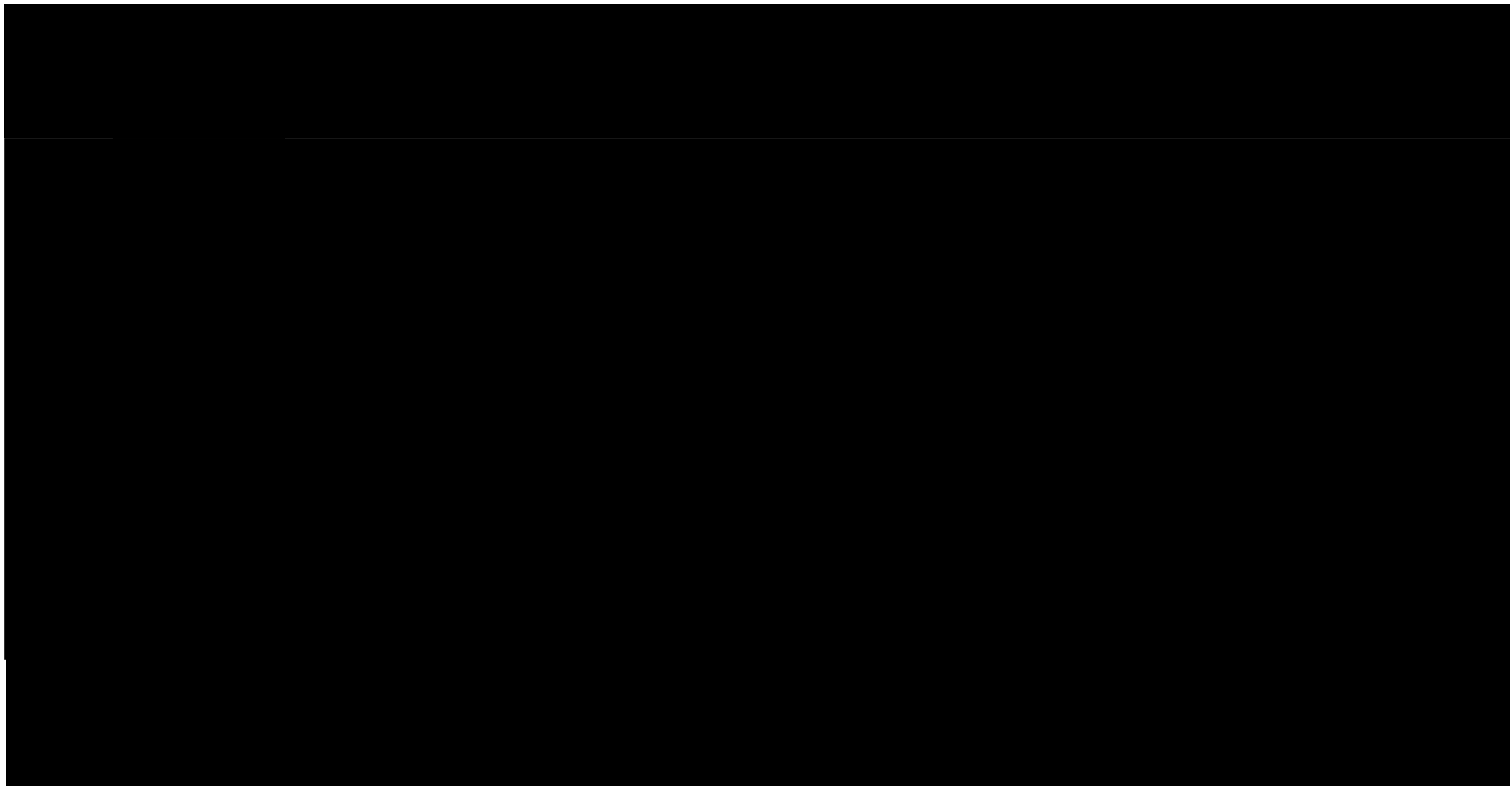
Declaration of Elizabeth A. Dean Concerning Prejudgment Interest, November 13, 2015, Exhibit D.
Assumes simple interest.

[b] Tab 7(b). 2010 increasing principal is the sum of the increasing principal of years 2006-2010.

*Assuming the Court determines that prejudgment interest is appropriate on the Nevada damages award, this calculation reflects a correction to Ms. Dean's alternative erroneous prejudgment interest calculation to the Nevada damages award.

Tab 7a

Tab 7(a)



Tab 7b

Tab 7(b)

